

### REMARKS

Claims 1-6 remain pending in the application. Claim 1 is in independent form.

Claims 1-6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nakano et al. (United States Patent No. 6,306,957) in view of Peterson (United States Patent No. 5,011,870). The Applicant respectfully traverses this rejection on the basis that the Examiner has not established a *prima facie* case of obviousness.

To summarize the relevant standards that the Examiner must apply in performing an obviousness analysis of the instant claims, 35 U.S.C. §103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007). As the Examiner is aware, the question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). See also *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. at 1734, 82 USPQ2d at 1391.

Further, the Supreme Court in *KSR Int'l Co. v. Teleflex Inc.* noted that the analysis supporting a rejection under 35 U.S.C. §103 should be made explicit. *Id.* at 1396. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational

underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. at 1396 (quoting Federal Circuit statement with approval).

The Applicant respectfully submits that the Examiner’s position relative to obviousness of independent claim 1 in the present application over the combination of Nakano et al. in view of Peterson is deficient and violates the standards for establishing a prima facie case of obviousness set forth by *Graham*. Notably, the Examiner must provide reasons for why a person of skill in the art would have combined the elements of Nakano et al. and Peterson in the manner claimed in independent claim 1 of the instant claims, without relying on impermissible hindsight. That is, for the Examiner to reach a proper determination under 35 U.S.C. §103, the Examiner must follow the guidelines of MPEP 2142:

[t]he examiner must step backward in time and into the shoes worn by the hypothetical “person of ordinary skill in the art” when the invention was unknown and just before it was made. In view of all factual information, the examiner must then make a determination whether the claimed invention “as a whole” would have been obvious at that time to that person. Knowledge of applicant’s disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the “differences,” conduct the search and evaluate the “subject matter as a whole” of the invention. The tendency to resort to “hindsight” based upon applicant’s disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

MPEP §2145 X.A. furthers states,

“[a]ny judgment on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it

takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper.” *In re McLaughlin* 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971).

Currently, the Applicant respectfully submits that the Examiner has relied on impermissible hindsight to arrive at a conclusion that was **not** reached on the basis of the facts gleaned from the combination of Nakano et al. and Peterson, **but rather upon knowledge gleaned only from the Applicant's disclosure.**

The Examiner has correctly interpreted the teachings of Nakano et al. as failing to teach a silicone where one of the groups bonded to silicon is an alkenyl group. In an attempt to satisfy the deficiencies of Nakano et al., the Examiner has turned to the teaching of Peterson. That is, the Examiner has stated that Peterson teaches 1) a liquid polyorganosiloxane matrix polymer for aluminum hydride containing thermoconductive compositions where the silicon bonded groups are monovalent substituted or unsubstituted hydrocarbon groups (col. 4, lines 35-46 of Peterson), and 2) that each molecule of the polyorganosiloxane can optionally contain one or more functional groups, such as ethylenically unsaturated groups (col. 4, lines 47-55), bonded to silicon atoms. In a blatant violation of the prohibition against impermissible hindsight, the Examiner then concluded that, based upon the general teachings in Peterson, the specific structure shown in Figure 3 can be envisioned:

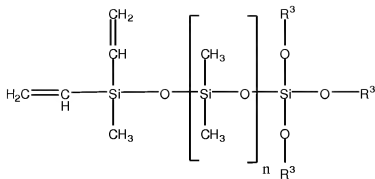


Figure 3

where  $\text{R}^3$  is an alkoxy group of 1-4 carbons. (The Applicant respectfully suggests that there is a typographical error in Figure 3 of the present Office Action in that the letter “m” should be the letter “n”. The Applicant has corrected the typographical error in the Figure 3 reproduced herein.)

The Applicant respectfully submits that the Examiner has used the Applicant’s application as a road map, i.e., the Examiner has employed impermissible hindsight, to arrive at the specific structure of Figure 3. The Examiner has used the general disclosure of Peterson in a highly conclusory manner to arrive at the specific structure in Figure 3. In particular, there is nothing in the combined teaching of Nakano et al. and Peterson that teaches combining alkoxy and unsaturated functionality in the same molecule, and there is clearly nothing in the combined teachings of Nakano et al. and Peterson that directs one of skill in the art to choose the specific structure of Figure 3 of the Office Action. Importantly, Peterson teaches that various functional groups can be included in the silicone taught therein, but makes clear that two of the same types of functional groups are required under some circumstances. Peterson never specifically

addresses a combination of unsaturation and alkoxy functionality in the same molecule, and clearly never teaches the relative position of such functionalities within the silicone molecule, which would be required to teach the structure depicted in Figure 3. The Applicant respectfully contends that the Examiner has selected one structure out of a multitude of possible silicones, based solely on the teachings in the Applicant's disclosure, to arrive at the specific structure in Figure 3. In sum, the Examiner has envisioned Figure 3 based on impermissible hindsight, i.e., knowledge gleaned only from the Applicant's disclosure, and there is insufficient teaching in the combination of Nakano et al. and Peterson that directs one of skill in the art to choose the specific structure of Figure 3 with alkoxy and unsaturated groups in the same molecule and in the same positions as set forth in Figure 3.

In view of the foregoing, the Applicant respectfully submits that independent claim 1, as well as the claims that depend therefrom, are non-obvious over the prior art including over the combination of Nakano et al. and Peterson. As such, the Applicant respectfully asserts that the rejections under 35 U.S.C. §103(a) over Nakano et al. in view of Peterson are overcome and must, therefore, be withdrawn.

Applicant respectfully submits that the claims are now in condition for allowance and respectfully requests such allowance. This response is timely filed; thus, it is believed that no further fees are presently due. If any additional fees are necessary to respond to the outstanding Office Action, you are hereby authorized to charge such fees to Deposit Account No. 08-2789, in the name of Howard & Howard Attorneys, P.C., or credit the account for any overpayment.

**Respectfully submitted,**

**HOWARD & HOWARD ATTORNEYS**

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Date

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